REMARKS/ARGUMENTS

Favorable reconsideration of this application in view of the above amendments and following remarks is respectfully requested.

Claims 9-15 and 17-28 are pending in this application. By this amendment, Claims 9, 20 and 24 are amended; Claim 16 is canceled; and no claims are added herewith. It is respectfully submitted that no new matter is added by this amendment.

Claims 9-28 were rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 3,830,261 to Hochberg in view of Senior Aerospace Metal Bellows Division.

It is respectfully submitted that the applied art does not teach or suggest bellows that include a thin metal and have troughs and ridges in which the cross section of the bellows has a sequence of S2-shapes or U-shapes, as recited in Claim 9.

Instead, Hochberg discloses a smooth metal tube 10 encased in an overwrap 12 which is formed from strands or roving fibrous material. The strands of fibrous material are braided directly over the exterior surface of the tube 10. The tube 10 is in the form of a body of a fuel line having a hollow interior defined by a hollow core or tube 10. The object of the Hochberg patent is to have a lightweight hollow body which seals itself after being penetrated by a foreign object. Therefore, an object of the Hochberg invention is to provide a self-sealing hollow body which experiences minimal amount of petalling upon being penetrated by a projectile. Surrounding the overwrap 12 is a layer 14 of sealant material, which is maintained in a state of compression so that it quickly reverts to its original shape when punctured.

Senior Aerospace Metal Bellows Division discloses metal bellows for use in aircraft engines for pressure and temperature sensing.

Accordingly, none of the applied art teaches or suggests bellows composed of a thin metal and having troughs and ridges where the troughs and ridges are a sequence of S2-

shapes or U-shapes, as recited in the claimed invention. The outstanding Office Action asserts that metal bellows can be either smooth or have troughs and ridges as shown in the figures provided on page 3 of the outstanding Office Action. However, it is unclear from the picture provided in the Office Action that the bellows includes troughs and ridges as set forth in the claimed invention. Further, the website provided in the outstanding Office Action for the bellows does not provide a bellows having troughs and ridges.

Even further, the outstanding Office Action acknowledges that Hochberg fails to disclose that the buffer material will cover the outer face of the bellows from the bottom of the troughs to a height that is 0.5 to 2.0 times the height of the ridges. However, the outstanding Office Action asserts that it would have been obvious to one of skill in the art to apply a foam material to the bellows with troughs and ridges that would cover the bellows from the bottom of the troughs to the ridges. The Office Action further asserts that optimal vibration absorbance is desired, since it has been held that discovering an optimum value of result effective variable involves only routine skill in the art in the absence of an unexpected result. However, Applicants respectfully disagree with the Office Action's position regarding the claimed feature of the troughs and ridges. In particular, as discussed above, the cited art is silent as to the teaching of troughs and ridges in the bellows. Therefore, none of the cited art recognizes that providing a buffer material covering the outer face of the bellows from the bottom of the troughs to a height that is .5 to 2.0 times the height of the ridges is a result-effective variable. As discussed in MPEP § 2144.05(II), a particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of the variable might be characterized as routine experimentation. Please see *In re Antonie*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977).

As discussed in the specification at least at pages 5-6, since the outer face of the bellows of the vibration-absorbing tube according to the present invention is covered (filled) with the buffer material from the bottom to a predetermined height of the troughs of the bellows, the bellows exhibits improved vibration absorbency. Consequently, the vibration-absorbing tube can absorb vibration with a broader frequency spectrum and higher energy intensity. In order to yield sufficient vibration absorbency, the bellows should be covered (filled) with the buffer material from the bottom up to a height of 0.5 times or more the height of the ridges of the bellows. As such, one of ordinary skill in the art would not have arrived at the claimed features based on the cited references, which fail to even identify an amount of buffer material that might be applied to troughs and ridges of a bellows as a result-effective variable. Again, Hochberg is concerned with providing a self-sealing hollow body which will quickly seal a fuel line or fuel tank in a military aircraft after being punctured by a projectile.

Accordingly, withdrawal of the rejection of the claims under 35 U.S.C. § 103(a) is respectfully requested.

Consequently, for the reasons discussed in detail above, no further issues are believed to be outstanding in the present application, and the present application is believed to be in condition for formal allowance. Therefore, a Notice of Allowance is earnestly solicited.

Should the Examiner deem that any further action is necessary to place this application in even better form for allowance, the Examiner is encouraged to contact the undersigned representative at the below listed telephone number.

Respectfully submitted,

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